

AD-A047 873

ADVANCED COMPUTER TECHNIQUES CORP ARLINGTON VA
RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS TO BIOLOGIC--ETC(U)
MAY 76 W H SMITH

F/G 5/2
DADA17-68-C-8106
NL

UNCLASSIFIED

WRAIR-72

| 0f |
ADA047873



END
DATE
FILMED
1 -78
DDC

12

AD _____

AD A 0 4 7 8 7 3

REPORT NUMBER 9

RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS
TO BIOLOGICAL PROGRAMS

ANNUAL REPORT
1 September 73 - 30 August 74

ACT TECHNICAL STAFF

WILLIAM H. SMITH
Principal Investigator

15 May 1976

Supported by

U.S. ARMY MEDICAL RESEARCH & DEVELOPMENT COMMAND
Washington, D.C. 20314

DDC
RECEIVED
DEC 19 1977
E

Contract No. DADA17-68-C-8106

Advanced Computer Techniques Corporation
1501 Wilson Blvd., Arlington, Virginia 22209

"Approved for public release; distribution unlimited."

The findings in this report are not to be construed as an official
Department of the Army position unless so designated by other
authorized documents.

AD No. _____
DDC FILE COPY

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 9 ✓	2. GOVT ACCESSION NO.	3. REPORT'S CATALOG NUMBER 9 Rept. no. 9
4. TITLE (and Subtitle) 6 Research Effort to Develop Operational Improvements to Biological Programs.		7. TYPE OF REPORT & PERIOD COVERED (Annual) 1 Sep 73 - 30 Aug 74,
7. AUTHOR(s) 10 William H. Smith		6. PERFORMING ORG. REPORT NUMBER 18 WRAIR 72 ✓ 1972
9. PERFORMING ORGANIZATION NAME AND ADDRESS Advanced Computer Techniques Corporation ✓ 1501 Wilson Blvd. Arlington, Va. 22209		8. CONTRACT OR GRANT NUMBER(s) 15 DADA17-68-C-8106 ✓
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Medical Research and Development Command Washington, D.C. 20314		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 62759A, 3A762759A829, 00.115 16
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) 12 5p.		12. REPORT DATE 11 15 May 1976 12 pp
		13. NUMBER OF PAGES 6
		15. SECURITY CLASS. (of this report) Unclassified
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE		
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Biology, Information Processing, Chemical Structure, Computer Information System.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Synopsis of activities performed by Advanced Computer Techniques Corporation in developing new biology test systems.		

LB

288 634

FOREWORD

The present contractual effort is a continuation of a research project initiated in August of 1967.

This research is conducted under the overall cognizance of Col. William E. Rothe, V.C. Director of the Division of Medicinal Chemistry, and is conducted under the immediate direction of Lt. Col. Kenneth E. Kinnanon, Head of the Department of Biology.

ACCESSION for		
Y IS	Wire Section	<input checked="" type="checkbox"/>
DDC	Bull Section	<input type="checkbox"/>
MANUSCRIPT		<input type="checkbox"/>
JUSTIFICATION		
BY		
DISTRIBUTION/AVAILABILITY CODES		
Dist	AVAIL	SPECIAL
A		

I. INTRODUCTION

Walter Reed Army Institute of Research (WRAIR) had developed a complex network of computer programming systems for storage, retrieval and association of chemical structures information and related data resulting from biology tests.

Advanced Computer Techniques Corporation (ACT) has supported the research efforts at WRAIR primarily in the area of developing biological programming systems.

During the contractual period covered by this report, the following efforts were enacted:

- A. System Specifications.
- B. File Design
- C. Data Flow
- D. Conversion Program
- E. Program Specifications

II. OBJECTIVES

- A. Design of a new biology system for the CDC3500.
- B. Develop conversion programs for converting current master files to compatible format for processing under the new biology system.

III. ACCOMPLISHMENTS DURING THE YEAR

- A. Total system specifications for the new disk oriented biology system for the CDC 3500 was completed.
- B. The following areas of development were also completed:
 - (1) File design
 - (2) Data flow
 - (3) Program specifications for the following:
 - (a) Pre-Processor

- (b) Generalized Edit
 - (c) Interface program, for interfacing with the compound inventory files.
 - (d) Sorts; source code and accession number.
 - (e) Interface Program, for interfacing with code 10 files (name and address file)
 - (f) Update Program
- (c) ACT provided maintenance services to the 7090/94 system. Some production assistance was also provided.

IV. CONCLUSION

At the end of the contract year the overall system design for the new biology system was completed. Conversion programs for converting current master files were completed.